

REMARKS

Claims 175 and 176 stand rejected under 35 U.S.C. 112, second paragraph, as providing insufficient antecedent basis for “said line portions.” Applicants respectfully traverse. Claims 175 and 176 both depend from independent claim 170. Both claims also do not merely recite “said line portions,” as asserted by the Examiner, but instead actually recite “said line portions of said first and second domain regulating means.” (Emphasis added). Neither claim is indefinite because claim 170 clearly recites first line portions and second line portions of the first domain regulating means, and third line portions and fourth line portions of the second domain regulating means. Applicants submit that all of these claims are clear to one skilled in the art, and none are indefinite or fail to provide proper antecedent basis. Reconsideration and withdrawal of this rejection are therefore respectfully requested. ✓

Claims 170-171 and 175-186 stand rejected under 35 U.S.C. 102(b) as being anticipated by Hisatake et al. (U.S. 5,434,690). Applicants respectfully traverse this rejection because Hisatake is drawn to a scattering mode liquid crystal display device, whereas the present invention relates to a non-scattering type liquid crystal display device having electrically controlled birefringence (“ECB”).) ①

Hisatake is clearly drawn to a liquid crystal display ("LCD") device for high light scattering characteristics. (See column 3, lines 56-58; column 4 line 1; column 8, line 46). Throughout its entire disclosure, Hisatake focuses on a scattering mode display device.

In contrast, the independent claims of the present invention have been amended to emphasize that the present invention is drawn to an ECB type liquid crystal display device, which is a non-scattering type display device. One skilled in the art is well apprised that scattering type devices and non-scattering type devices are not equivalents. In the scattering type LCD, the display state of each cell is determined whether or not incident light to each cell is scattered. If a large domain in which liquid crystal molecules are oriented in the same direction is generated, scattering of incident light cannot be controlled. In other words, scattering type LCD devices must generate many boundaries in each cell to control the cell in a scattering state.

ECB type LCD devices, on the other hand, determine the display state of each cell by an alignment angle of liquid crystal molecules within each domain. Several domains can be generated in each cell to improve the viewing angle characteristic of that cell. Such a device is different from the scattering type, however, in that the number of domains is preferably limited in each cell to prevent incident light being scattered at the boundaries of the domains. Because these two types of devices are not equivalent, and because Hisatake fails to disclose an ECB type LCD device, or even a non-scattering device, the Section 102 rejection based on Hisatake is respectfully traversed.

Claims 172-174 and 187 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hisatake in view of Lien et al. (US 5,309,264). Applicants respectfully traverse this rejection for at least the reasons discussed above in traversing the rejection based solely on Hisatake. Claims 172-174 all depend indirectly from independent claim 170, and claim 187 depends indirectly from independent claim 183. Applicants further traverse as follows.

As discussed above, the operational principle of a scattering mode LCD device, as described by Hisatake, is entirely different from an ECB mode LCD device of the present invention. Because the two types of devices operate under opposing principles, Applicants submit that it could not have been obvious to combine Hisatake with Lien to reach the present invention. Any reference which teaches away from the present invention cannot form the basis of a rejection based on obviousness. In the present case, Hisatake teaches a scattering mode LCD device, which directly teaches away from the present invention's non-scattering mode device. Accordingly, for at least these additional reasons, the Section 103 rejection based on a combination of Hisatake and Lien is respectfully traversed.

For all of the foregoing reasons, Applicants submit that this Application, including claims 170-187, is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

Respectfully submitted,

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